

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application. Please amend the claims as shown below.

1-11. (Cancelled)

12. (Currently Amended) A synthesized silica glass optical member having a transmittancy in the range of about 73.4 to 75% manufactured by:

providing a porous silica glass body;

heating the porous silica glass body to a temperature within a range of 500°C to 1000°C in an atmosphere containing hydrogen; and

sintering the porous silica glass body in an atmosphere containing a fluorine compound.

13-18. (Cancelled)

19. (Previously Presented) A synthesized silica glass optical member according to claim 12, wherein the heating precedes the sintering.

20. (Previously Presented) A synthesized silica glass optical member according to claim 12, wherein providing the glass body includes forming glass particles by flame hydrolysis of a raw material.

21. (Currently Amended) A synthesized silica glass optical member having a transmittancy in the range of about 72 to 72.2% manufactured by:

providing a porous silica glass body;

heating the porous silica glass body in an atmosphere containing oxygen; and
after the heating step, sintering the porous silica glass body in an atmosphere
containing a fluorine compound.

22. (Currently Amended) A synthesized silica glass optical member according to claim 21,
wherein a temperature of said heating is within a range from 500°C to a critical temperature
below which the porous silica glass body does not shrink.

23. (Previously Presented) A synthesized silica glass optical member according to claim 21,
wherein a temperature of said heating is 1250°C or below.

24. (Previously Presented) A synthesized silica glass optical member according to claim
21, wherein providing the glass body includes forming glass particles by flame hydrolysis of
a raw material.

25. (Previously Presented) A synthesized silica glass optical member according to claim
21, wherein the fluorine compound comprises SiF₄.

26. (New) A synthesized silica glass optical member according to claim 12, wherein heating
is carried out in an atmosphere free of fluorine compound.

27. (New) A synthesized silica glass optical member according to claim 21, wherein heating
is carried out in an atmosphere free of fluorine compound.